Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A modular computer system for mounting in a multi-tiered support, and configured to use a liquid coolant, comprising:

a computer chassis configured for mounting in the multi-tiered support;

a first computer component within the computer chassis;

a first cold plate in thermal communication with the first computer component, the first cold plate being configured to conduct heat from the first component, and further configured to be convectively cooled by the coolant;

a second computer component within the chassis; and

a second cold plate in thermal communication with the second computer component, the second cold plate being configured to conduct heat from the second component, and further configured to be convectively cooled by the coolant

a heat exchanger configured to dissipate heat from the coolant, wherein the first and second cold ~~plate~~ plates and the heat exchanger form at least part of a closed-loop cooling system; [and]

a coolant pump configured to pump the coolant through the closed-loop cooling system; and

a control system configured to control the level of cooling provided to the first and second computer components;

wherein the cooling system is configured to deliver coolant to the first and second computer components in parallel; and

wherein the control system is configured to control the relative rate of coolant flow to the first and second computer components.

2. (previously presented) The modular computer system of claim 1, and further comprising an air mover configured to cool the heat exchanger.

3. (previously presented) The modular computer system of claim 2, wherein the air mover is further configured to pump air heated by the heat exchanger out one or more exhaust vents in the chassis.

4. (currently amended) The modular computer system of claim 2, wherein:

the air mover is a plurality of fans extending across an intermediate portion of the chassis to define two chambers, the fans being configured to move air from a first chamber of the two chambers to a second chamber of the two chambers; and

[the] chassis exhaust vents ventilate the second chamber.

5. (previously presented) The modular computer system of claim 2, and further comprising one or more additional computer components within the computer chassis, wherein the air mover causes airflow that directly cools the one or more additional components.

6. (previously presented) The modular computer system of claim 5, wherein the air mover blows directly toward the one or more additional computer components.

7. (previously presented) The modular computer system of claim 5, wherein the air mover draws air through the heat exchanger, and blows air toward the one or more additional computer components.

8. (previously presented) The modular computer system of claim 2, wherein the air mover configured to blow in a crosswise direction to an exhaust direction.

9. (currently amended) The modular computer system of claim 2, and further comprising a <u>first</u> component cover configured to cover the <u>first</u> cold plate such that it limits disturbance of airflow over the cooled <u>first</u> cold plate.

10. (previously presented) The modular computer system of claim 1, wherein the chassis is a 1U rackmount chassis.

11. (canceled)

12. (currently amended) The modular computer system of claim [11] 1, wherein the control system ~~controls~~ is further configured to control the operating power of the pump.

13-15. (canceled)

16. (currently amended) A modular computer system for mounting in a multi-tiered support, comprising:

a computer chassis configured for mounting in the multi-tiered support;

a first computer component within the computer chassis;

a means for convectively removing heat from the first computer component using a liquid coolant;

a second computer component within the computer chassis;

a means for convectively removing heat from the second computer component using the liquid coolant;

a means for removing heat from the coolant; ~~and~~

a means for transferring the heat that was removed from the coolant, out of the chassis; and

a control system configured to control the level of cooling provided to the first and second computer components;

wherein the control system is configured to control the relative level of cooling between the first and second computer components.

17. (currently amended) A method for cooling a modular computer system including a computer chassis containing a first computer component and a second computer component, mounted in a multi-tiered support, comprising:

mounting the computer chassis in a multi-tiered support;

convectively removing heat from the first and second computer ~~component~~ components using a liquid coolant;

controlling the relative level of cooling between the first and second computer components;

removing heat from the coolant using a heat exchanger; and

transferring the heat removed from the fluid out of the chassis.

18. (previously presented) The method of claim 17, wherein the chassis is a 1U rackmount chassis.

19. (currently amended) The method of claim 17, wherein the chassis is ~~a thin rackmount chassis~~ less than or equal to 2U in height.

20. (currently amended) A modular computer system configured to use a liquid coolant, comprising:

a multi-tiered support; and

the modular computer system of claim 1 mounted in the multi-tiered support.

~~a computer chassis configured for mounting in the multi-tiered support;~~

~~a computer component within the computer chassis;~~

~~a cold plate in thermal communication with the computer component, the cold plate being configured to conduct heat from the component, and further configured to be convectively cooled by the coolant;~~

~~a heat exchanger configured to dissipate heat from the coolant, wherein the cold plate and the heat exchanger form at least part of a closed-loop cooling system; and~~

~~a coolant pump configured to pump the coolant through the closed-loop cooling system.~~

21-26 (canceled)

27. (previously presented) A modular computer system for mounting in a multi-tiered support, and configured to use a liquid coolant, comprising:

a computer chassis configured for mounting in the multi-tiered support;

a plurality of computer components within the computer chassis; and

a closed-loop cooling system including a plurality of cooling devices and a heat exchanger, wherein the plurality of cooling devices are configured to transfer heat from the plurality of computer components to a stream of coolant, wherein the heat exchanger is configured to dissipate heat from the coolant, and wherein the heat exchanger includes a first heat-exchanger portion and a second heat-exchange portion, the first and second heat-exchange portions having coolant passageways separated from one another at both of two different ends by one or more of the plurality of cooling devices.

28-29 (canceled)

30. (new) A modular computer system configured to use a liquid coolant and a fluid, comprising:

a multi-tiered support configured with a plurality of connections for connecting to a plurality of computer chassis, wherein the multi-tiered support defines passageways configured to deliver the fluid to each computer chassis connection;

a computer chassis configured to mount in the multi-tiered support, to connect to a connection of the plurality of connections, and to receive the fluid from the connection;

a computer component within the computer chassis;

a cold plate in thermal communication with the computer component, the cold plate being configured to conduct heat from the component, and further configured to be convectively cooled by the coolant;

a heat exchanger within the computer chassis configured to dissipate heat from the coolant, wherein the cold plate and the heat exchanger form at least part of a closed-loop cooling system; and

a coolant pump configured to pump the coolant through the closed-loop cooling system;

wherein the computer chassis and heat exchanger are configured for cooling the heat exchanger with the fluid.

31. (new) The modular computer system of claim 30, wherein the fluid is a chilled gaseous fluid.

32. (new) The modular computer system of claim 30, wherein the fluid is a liquid.

33. (new) The modular computer system of claim 32, and further comprising a heat sink external to the plurality of chassis and configured to cool the fluid.

34. (new) The modular computer system of claim 33, wherein the heat sink is exclusively used to cool fluid heated used within the multi-tiered support.

35. (new) The modular computer system of claim 33, wherein the heat sink is used to cool fluid heated in a plurality of multi-tiered supports.

36. (new) The modular computer system of claim 32, wherein the multi-tiered support receives fluid from a substantially endless fluid supply.

37. (new) The modular computer system of claim 30, wherein:
the fluid is a refrigerant;
the heat exchanger is evaporatively cooled with the refrigerant; and
the refrigerant is re-condensed in an external heat exchanger.

38. (new) A modular computer system configured to use a coolant, comprising:
a multi-tiered support configured with a plurality of connections for connecting to a plurality of computer chassis, wherein the multi-tiered support defines passageways configured to deliver the coolant to each computer chassis connection;
a computer chassis configured to mount in the multi-tiered support, to connect to a connection of the plurality of connections, and to receive the coolant from the connection;
a computer component within the computer chassis;
a cold plate in thermal communication with the computer component, the cold plate being configured to conduct heat from the component, and further configured to be convectively cooled by the coolant.

39. (new) The modular computer system of claim 38, and further comprising a heat exchanger external to the plurality of chassis and configured to cool the coolant.